

# Work Order ID 76062

**\*76062\***

Page 1

Friday, November 25, 2011 3:36:18 PM

Item ID: D412-783-011

Accept

**\*N9000040100\***

Setup Start **\*NS1\***

Revision ID:

Stop: **\*NS2\***

Item Name: Gross Weight Towing

Start Date: 11/4/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 11/7/2011 Req'd Qty: 1.00

**\*1\***

Customer:

CU-DAR001

Reference: RMA RA111280

Approvals: Process Plan: *MF*

Date: *11-11-25* Tooling:

Date:

Run Start **\*NR1\***

QC:

Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3943

D

IIN-D412-783

C

100

0.00

**\*100\***

QC

Quality Control

Memo

0.00

INSPECT RA 111280 D412-783-011 X 1 B70193

110

0.00

**\*110\***

Large Fab

Large Fab

Memo

0.00

PULL RETURN D412-783-011 B70193

-DISSASSEMBLE PARTS:

D3943-041

D3954-1

D3954-3

D3951-041 IS SCRAP

*Canceled*  
*Parts are missing!*

**Work Order ID 76062****\*76062\***

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Friday, November 25, 2011 3:36:18 PM

Item ID: D412-783-011

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**\*N9000040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Gross Weight Towing

Start Date: 11/4/2011 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 11/7/2011 Req'd Qty: 1.00

**\*1\***

Customer:

CU-DAR001

Reference: RMA RA111280

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00

**\*120\***

QC

Memo

0.00

Quality Control

130

Hybrid safety Yellow 4.3.5.12

0.00

**\*130\***

Powdercoat

Memo

0.00

Powder Coating

SCUFF PARTS AND REPOWDER COAT

1- MASK THREADS PRIOR TO PAINTING AS PER DWG

2- POWDER COAT:

Start Time: \_\_\_\_\_

Oven Temperature: \_\_\_\_\_

Finish Time: \_\_\_\_\_

**Work Order ID 76062****\*76062\***

Page 3

Friday, November 25, 2011 3:36:18 PM

Item ID: D412-783-011

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Gross Weight Towing

Start Date: 11/4/2011 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 11/7/2011 Req'd Qty: 1.00 **\*1\***

Customer: CU-DAR001

Reference: RMA RA111280

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC3- Inspect Part Finish	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									
150		0.00							
<b>*150*</b>									
Large Fab	Memo	0.00							
Large Fab	RE-ASSEMBLE KIT								
160	QC5- Inspect part completeness to step on W/O	0.00							
<b>*160*</b>									
QC	Memo	0.00							
Quality Control	1-Calibrate and tag as per dwg and QSI 008 4.4 ***Calibration Cert. filled out***								

**\*76062\***

Page 4

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 11/4/2011      **Start Qty:** 1.00      **\*1\***

**Cust Item ID:**

**Required Date:** 11/7/2011      **Req'd Qty:** 1.00      **\* 1 \***

Customer:	CU-DAR001
-----------	-----------

**Reference:** RMA RA111280

Approvals:      Process Plan: \_\_\_\_\_      Date: \_\_\_\_\_      Tooling: \_\_\_\_\_      Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

## Operation Description

### Set Up/ Run Hours

**Tool ID**

Tool #

## Plan Code

**Accept  
Qty**

Reject Qty

Reject  
Number

**Insp.  
Stamp**

Identify as per dwg & Stock Location:\_\_\_\_\_

0.00

**\*170\***

0.00

### Packaging

## Memo

## Packaging

ID AND STOCK UNDER NEW BATCH NUMBER

QC4- 100% Inspect kits for completeness

0.00

**\*180\***

0.00

QC

## Memo

## Quality Control

QC21- Final Inspection - Work Order Release

0.00

**\*190\***

0.00

QC

## Memo

### Quality Control

# Work Order ID 70193

Tuesday, May 31, 2011 10:26:27 AM



*[Signature]* Page 1

Item ID: D412-783-011

Accept



Setup Start



Revision ID:

REFERENCE ONLY

Stop



Item Name: Gross Weight Towing

Start Date: 5/31/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/6/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *[Signature]* Date: 11-05-31

Tooling:

Date:

Run Start



QC: Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3943

C

IIN-D412-783

A

100

0.00



DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPPD412-783-011 CHG 003

*8 x 6 1/2*

*CL 11-6-3*

110

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

*11/6/2*

**Work Order ID 70193**

Tuesday, May 31, 2011 10:26:27 AM

Page 2

Item ID: D412-783-011

Accept

Revision ID:

Item Name: Gross Weight Towing

Start Date: 5/31/2011 Start Qty: 1.00

Required Date: 6/6/2011 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

\*\*\*ENSURE CALIBRATION CERT. IS IN IIN PAPER WORK\*\*\*

8/10/06

130

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-783-011

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

11/4/06

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/6/06

ME  
11-06-06

# Picklist Print

Tuesday, May 31, 2011 10:26:23 AM

Page 1

Work Order ID: 70193

Parent Item: D412-783-011

Parent Item Name: Gross Weight Towing

Start Date: 5/31/2011

Required Date: 6/6/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 09-06-02 JLM Verified By:EC IPP Rev:B @  
chg 002 DD 10.02.22 Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3943-041

Manufactured

No

110

Each

0.0000

1

1

Ground Handling Crank Assembly

D3951-041

Manufactured

No

110

Each

11.0000

1

1

Equipment Bag Assembly

## Location

## Loc Qty

## Loc Code

ST453

7

70024

7

ST460

4

55714

4

D3954-1

Manufactured

No

110

Each

25.0000

2

GWT Pin

## Location

## Loc Qty

## Loc Code

ST097

25

70030

25

D3954-3

Manufactured

No

110

Each

4.0000

2

GWT Knob

## Location

## Loc Qty

## Loc Code

ST097

4

68812

4

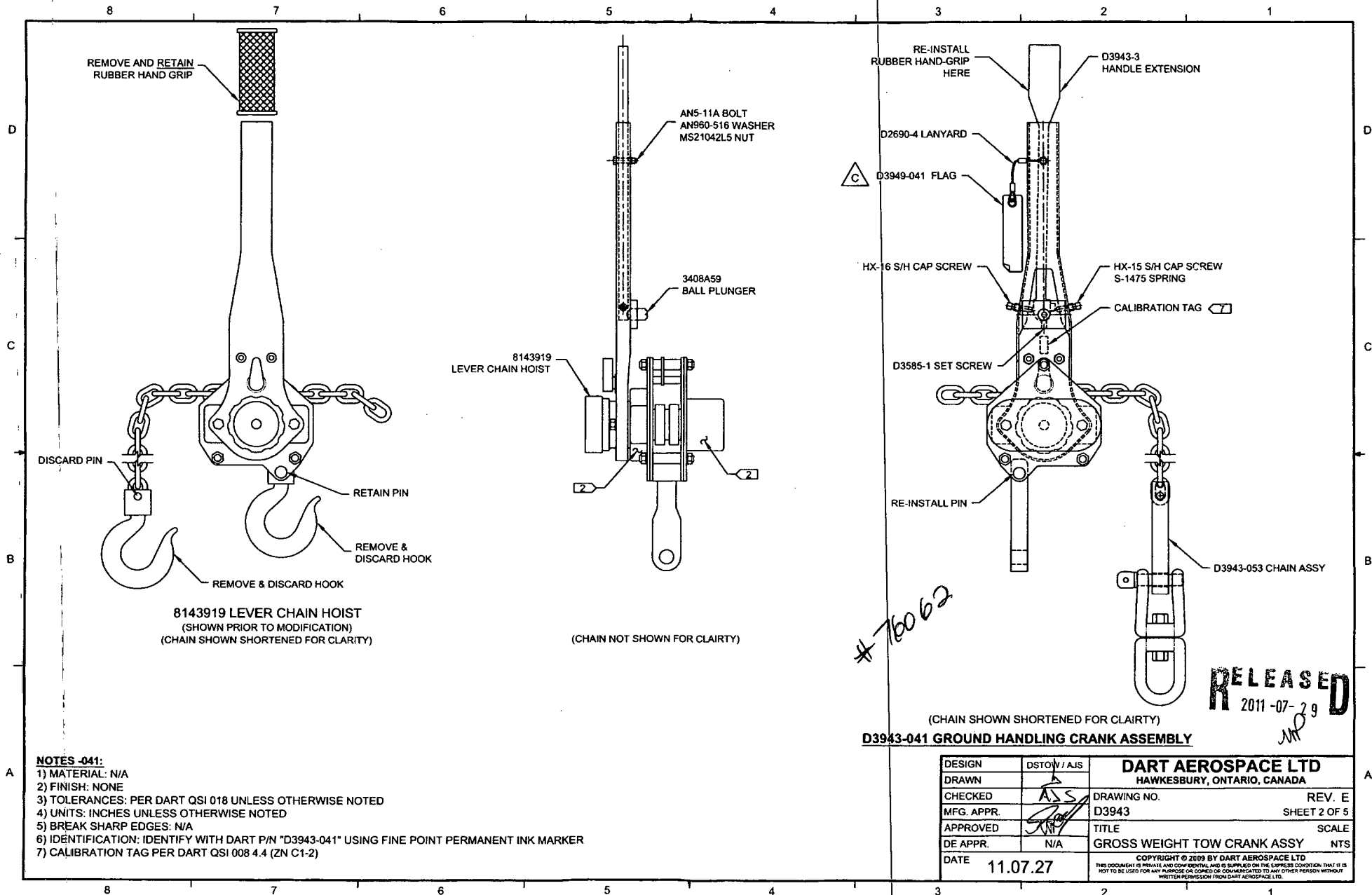
ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
16			1	D4405-1	EYE AND FORK SWIVEL	
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
51	1			S-1475	SPRING	REID SUPPLY
52	1			3408A59	BALL PLUNGER	McMASTER CARR
53	1			HX-15	SOCKET HEAD CAP SCREW 1/4-20 UNC X 0.75 LG	HASKINS
54	1			HX-16	SOCKET HEAD CAP SCREW 1/4-20 UNC X 1.0 LG	HASKINS

RELEASED  
2011-07-29

E	CHANGED D3945-3 MAT'L TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5). PER PART11-113.	MB	11.07.27
D	SHT 1 PL, ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED), SHT 2 ZN D3 FLAG RELOCATED, SHT 3 ZONE D3, Ø.12 HOLE DELETED. (SEE NCR 11-495)	AJS	11.05.16
C	RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001	CP	10.01.26
B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTON / AJS		
DRAWN			
CHECKED	ASS		
MFG. APPR.			
APPROVED			
DE APPR.	N/A		
DATE	11.07.27		
<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3943 REV. E SHEET 1 OF 5 TITLE GROSS WEIGHT TOW CRANK ASSY SCALE NTS COPYRIGHT © 2009 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>			

# 76062





D3943-1 HANDLE

2 PL

9.75

2.00

Ø0.31  
THRU

D3943-7 STUD  
2 PL

THREAD  $\frac{1}{4}$  -20 UNC-2B  
THRU



**VIEW A-A**  
A5-3  
(SCALE 2X) B5-3

2 PL

9.38  
REF

A B1-3

D3943-5 PLATE

# **D3943-051 HANDLE ASSEMBLY**

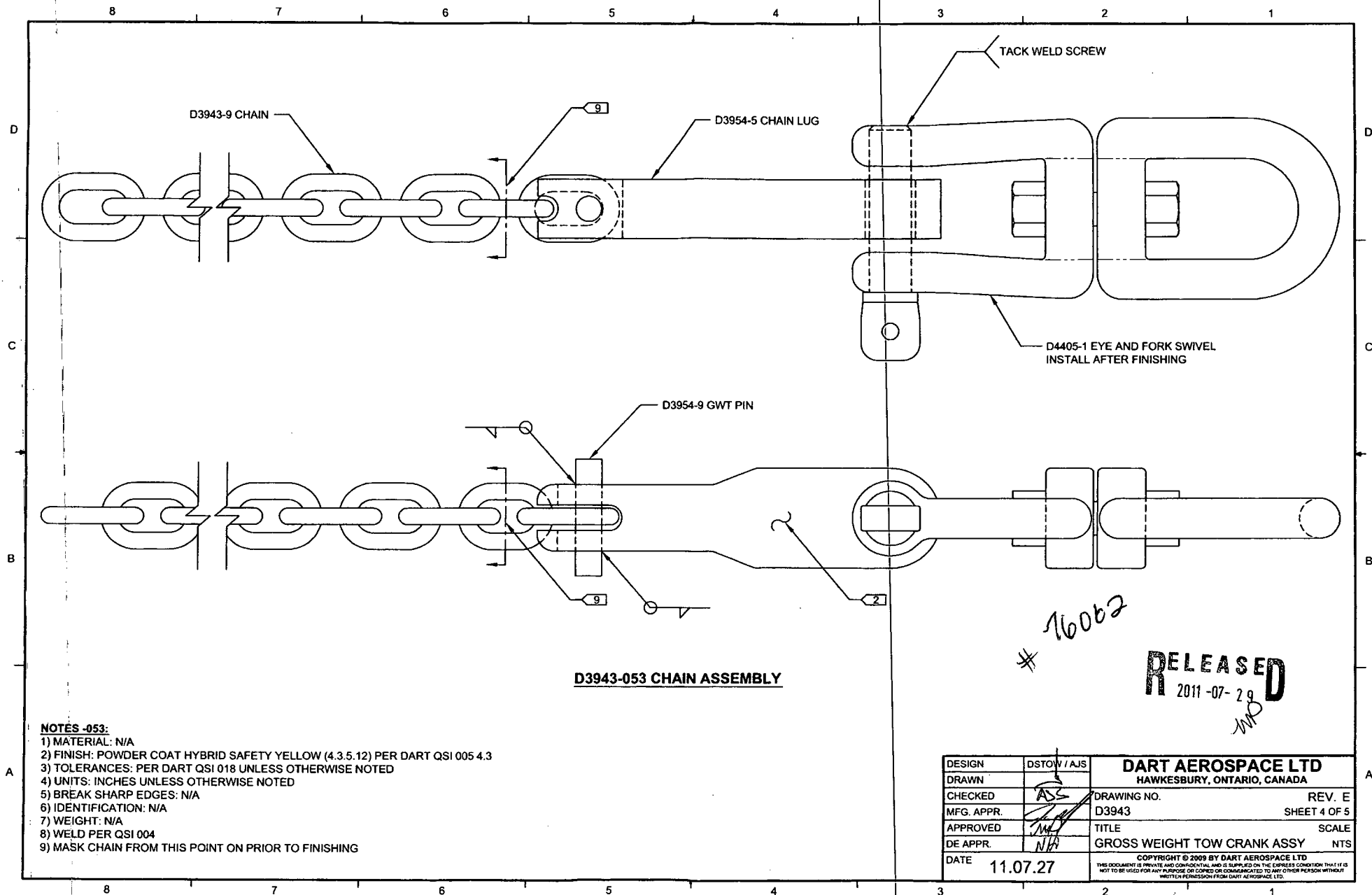
## **NOTES -051:**

- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS  
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

#76062

**RELEASED**  
2011-07-28

DESIGN	DSTOW / AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. E
CHECKED	ASS	D3943	SHEET 3 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DATE	11.07.27		

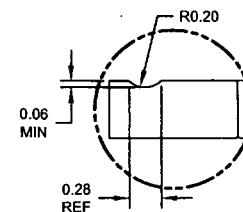
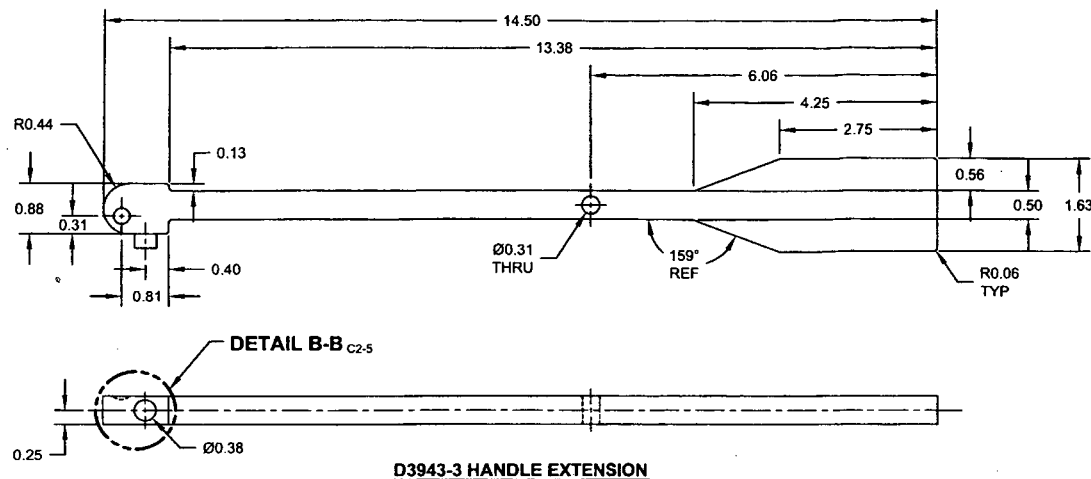


# 16062

**RELEASED**  
2011-07-28  
MS

DESIGN	DSTOW / AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. E
CHECKED	ASS	D3943	SHEET 4 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	11.07.27		

8 7 6 5 4 3 2 1



**DETAIL B-B C7-5**  
(DIMPLE DETAIL)  
(SCALE 2X)

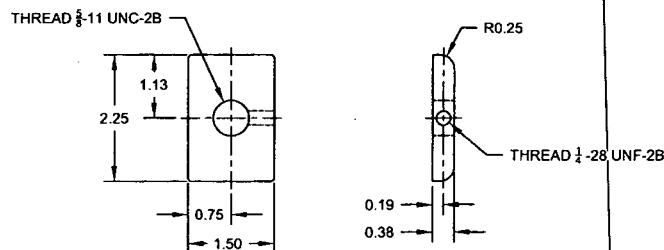
**NOTES:**

1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET  
ANNEALED 2B FINISH PER MIL-S-5059  
OR AMS 5513 (304) OR AMS 5524 (316)  
OR ASTM A240 OR ASME SA240  
REF DART SPEC M304S  
OR:  
AISI 303 STAINLESS STEEL SHEET  
ANNEALED 2B FINISH PER MIL-S-5059  
ASTM A240 OR ASME SA240  
REF DART SPEC M303S

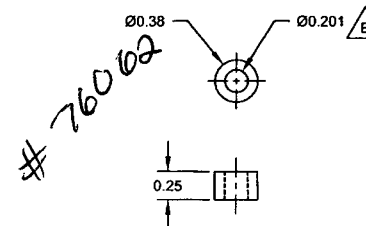
-5: MILD STEEL, SHEET  
AISI 1010-1025 OR ASTM A36/A366/A1008  
OR CSA G40-21, 38W/44W/50W/60W/70W  
REF DART SPEC M1010-S  
OR:  
MILD STEEL, BAR  
AISI 1010-1025 OR ASTM A36/A366/A569/A570  
OR CSA G40-21, 38W/44W/50W/60W/70W  
REF DART SPEC M1010-B

-7: MILD STEEL, ROUND BAR  
AISI 1018-1025  
PER MIL-S-7097  
REF DART SPEC M1018-R

2) FINISH: NONE  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
6) IDENTIFICATION: N/A



**D3943-5 PLATE**



**D3943-7 STUD**  
(SCALE 2X)

**RELEASED**  
2011-07-29  
N/A

DESIGN	DSTOW / AJS	<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. E
MFG. APPR.		D3943	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	11.07.27	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

# **RA 111280 D412-666-011 +** **D412-783-011**

Received @ Dart October 27<sup>th</sup>, 2011  
Inspected @ Dart November 3<sup>rd</sup>, 2011

## **Instructions for RA 111280 D412-666-011 B70557**

- Paper work opened therefore scrap
- No touch ups needed
- **Needs to repackaged in new bags**
- **NEEDS** work order to go back into stock
- Go back in to stock under **NEW BATCH #**

## **Instructions for RA 111280 D412-783-011 B70193**

- Paper work opened therefore scrap
- D3951-041 B70024 scrap
- Needs lots of work
  - Needs to dissembled
  - Needs to be completely re powder coated
  - Re assemble
  - **Needs to be RE CALIBRATED**
- **NEEDS** work order for rework
- Needs **NEW BATCH #**